### SEQUENCE LISTING

# (1) GENERAL INFORMATION:

(i) APPLICANT: Saiko HOSOKAWA

Toshiaki TAGAWA

Yoko HIRAKAWA

Norihiko ITO

Kazuhiro NAGAIKE

- (ii) TITLE OF INVENTION: Human Monoclonal Antibody
  Specifically Binding to Surface Antigen of Cancer
  Cell Membrane
- (iii) NUMBER OF SEQUENCES: 42
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Wenderoth, Lind & Ponack
  - (B) STREET: 2033 K Street, N.W., #800
  - (C) CITY: Washington
  - (D) STATE: D.C.
  - (E) COUNTRY: U.S.A.
  - (F) ZIP: 20006
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Diskette, 3.5 inch, 1.44 mb
  - (B) COMPUTER: IBM Compatible
  - (C) OPERATING SYSTEM: MS-DOS
  - (D) SOFTWARE: WordPerfect 5.1
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: 09/467,903
  - (B) FILING DATE: December 21, 1999
  - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: 08/450,363
  - (B) FILING DATE: May 25, 1995
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: 08/360,125
  - (B) FILING DATE: December 20, 1994
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: 07/905,534



- (B) FILING DATE: June 29, 1992
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Lee Cheng
  - (B) REGISTRATION NUMBER: 40,949
  - (C) REFERENCE/DOCKET NUMBER:
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: 202-721-8200
  - (B) TELEFAX 202-721-8250
  - (C) TELEX:
- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 37 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE: human IgG antibody
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE:
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:

		(C) UNITS:
	(ix)	FEATURE:
		(A) NAME/KEY:
		(B) LOCATION:
		(C) IDENTIFICATION METHOD:
		(D) OTHER INFORMATION:
	(x) I	PUBLICATION INFORMATION:
		(A) AUTHORS:
		(B) TITLE:
		(C) JOURNAL:
		(D) VOLUME:
		(E) ISSUE:
		(F) PAGES:
		(G) DATE:
		(H) DOCUMENT NUMBER:
		(I) FILING DATE:
		(J) PUBLICATION DATE:
		(K) RELEVANT RESIDUES:
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:1:
G GC	C CTT	GGT GGA GGC TGA AGA GAC GGT GAC CAT TCT 37
(2)	TNFO	RMATION FOR SEQ ID NO:2:
(2)		SEQUENCE CHARACTERISTICS:
	( - /	(A) LENGTH: 21 base pairs
		(B) TYPE: nucleic acid
		(C) STRANDEDNESS: double
		(D) TOPOLOGY: linear
	(ii)	MOLECULE TYPE: cDNA
	•	HYPOTHETICAL:
	•	ANTI-SENSE:
		FRAGMENT TYPE:
		ORIGINAL SOURCE: human IgG antibody
	· /	(A) ORGANISM:
		(B) STRAIN:

- INDIVIDUAL ISOLATE: (C) DEVELOPMENTAL STAGE: (D) (E) HAPLOTYPE: TISSUE TYPE: (F) (G) CELL TYPE: (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE: (A) LIBRARY: (B) CLONE: (viii) POSITION IN GENOME: CHROMOSOME/SEGMENT: (A) (B) MAP POSITION: (C) UNITS: FEATURE: (ix) (A) NAME/KEY: (B) LOCATION: (C) IDENTIFICATION METHOD: OTHER INFORMATION: (D) (x) PUBLICATION INFORMATION: (A) **AUTHORS:** (B) TITLE: (C) JOURNAL: (D) VOLUME: (E) ISSUE: (F) PAGES: (G) DATE: (H) DOCUMENT NUMBER: (I) FILING DATE: (J) PUBLICATION DATE: RELEVANT RESIDUES: (K) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2: TGG TGC AGC CAC AGT TCG TTT 21
  - (2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 357 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody GAH
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:

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- (C) JOURNAL:
- (D) VOLUME:
- (E) ISSUE:
- (F) PAGES:
- (G) DATE:
- (H) DOCUMENT NUMBER:
- (I) FILING DATE:
- (J) PUBLICATION DATE:
- (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

CAG GTG CAG CTG CAG GAG TCG GGC CCA GGA CTG GTG AAG CCT TCA 45 CAG ACC CTG TCC CTC ACC TGC ACT GTC TCT GGT GGC TCC ATC AGC 90 AGT TGT GGT TTC TAC TGG AAC TGG ATC CGC CAG CAC CCA GGG AAG 135 GGC CTG GAG TGG ATT GGG TAC ATC TAT TAC AGT GGG AGC ACC TAC 180 TAC AAC CCG TCC CTC AAG AGT CGA GTT ACC ATA TCG CTA GAC ACG 225 TCT AAG AGC CAG TTC TCC CTG AAG CTG AGC TCT CTG ACT GCC GCG 270 GAC ACG GCC GTG TAT TAC TGT GCG AGG TCT ACC CGA CTA CGG GGG 315 GCT GAC TAC TGG GGC CAG GGA ACA ATG GTC ACC GTC TCT TCA 357

- (2) INFORMATION FOR SEQ ID NO:4:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 342 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:

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- (F) TISSUE TYPE:(G) CELL TYPE: Hybridoma producing human antibody GAH(H) CELL LINE:
- (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:

#### (viii) POSITION IN GENOME:

- (A) CHROMOSOME/SEGMENT:
- (B) MAP POSITION:
- (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:
  - (F) PAGES:
  - (G) DATE:
  - (H) DOCUMENT NUMBER:
  - (I) FILING DATE:
  - (J) PUBLICATION DATE:
  - (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GAC ATC GTG ATG ACC CAG TCT CCA GAC TCC CTG GCT GTG TCT CTG

GGC GAG AGG GCC ACC ATC AAC TGC AAG TCC AGC CAG AGT GTT TTA

90
TAC AAC TCC AAC AAT AAG AAA TAC TTA GCT TGG TAC CAG CAG AAA

135
CCA GGA CAG CCT CCT AAG CTG CTC ATT TAC TGG GCA TCT ACC CGG

180

GAA	TCC	GGG	GTC	CCT	GAC	CGA	TTC	AGT	GGC	AGC	GGG	TCT	GGG	ACA	225
GAT	TTC	ACT	CTC	ACC	ATC	AGC	AGC	CTG	CAG	GCT	GAA	GAT	GTG	GCA	270
GTT	TAT	TAC	TGT	CAG	CAG	TAT	TAT	AGT	ACT	CCG	TGG	ACG	TTC	GGC	315
CAA	GGG	ACC	AAG	GTG	GAA	ATC	AAA	CGA							342

- (2) INFORMATION FOR SEQ ID NO:5:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 119 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody GAH
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:
    - (C) UNITS:
  - (ix) FEATURE:
    - (A) NAME/KEY:

- (B) LOCATION: (C) IDENTIFICATION METHOD: OTHER INFORMATION: (D) (x)PUBLICATION INFORMATION: **AUTHORS:** (A) TITLE: (B) (C) JOURNAL: VOLUME: (D) ISSUE: (E) PAGES: (F) (G) DATE: (H) DOCUMENT NUMBER: FILING DATE: (I) PUBLICATION DATE: (J) RELEVANT RESIDUES: (K) SEQUENCE DESCRIPTION: SEQ ID NO:5: Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser 10 15 1 Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser 25 20 Ser Cys Gly Phe Tyr Trp Asn Trp Ile Arg Gln His Pro Gly Lys 35 40 Gly Leu Glu Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr 60 55 50 Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Leu Asp Thr 70 75 65 Ser Lys Ser Gln Phe Ser Leu Lys Leu Ser Ser Leu Thr Ala Ala 85 80 Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Thr Arg Leu Arg Gly 105 95 100 Ala Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser 115 110
- (2) INFORMATION FOR SEQ ID NO:6:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (V) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody GAH
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:

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		(D)	VOI	LUME	:									
		(E)	ISS	SUE:										
		(F)	PAG	GES:										
		(G)	DAC	re:										
		(H)	DOG	CUME	и ти	JMBE	₹:							
		(I)	FII	LING	DAT	Ε:								
		(J)	PUI	BLICA	OITA	V DAT	ΓE:							
		(K)	REI	LEVAI	NT R	ESIDU	JES:							
()	κi)	SEQU	JENCI	E DES	SCRII	OIT	1: SI	EQ II	ои с	6:				
Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu
1				5					10					15
Gly	Glu	Arg	Ala	Thr	Ile	Asn	Cys	Lys	Ser	Ser	Gln	Ser	Val	Leu
				20					25					30
Tyr	Asn	Ser	Asn	Asn	Lys	Lys	Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys
				35					40					45
Pro	Gly	Gln	Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Trp	Ala	Ser	Thr	Arg
				50					55					60
Glu	Ser	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr
				65					70					75
Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala
				80					85					90
Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Tyr	Ser	Thr	Pro	Trp	Thr	Phe	Gly
				95					100					105
Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg						
				110										
(2)	INFO	RMAT	I NO	FOR S	SEQ :	ID NO	0:7:							
( :	i)	SEQU	JENCI	E CHA	ARAC	reri:	STIC	S:						
		(A)	LEI	NGTH:	: 1	7 bas	se pa	airs						
		(B)	TYI	PE:	nuc	leic	acio	Ĺ						
		(C)	STI	RANDI	EDNE	ss:	doul	ole						
		(D)	тоі	POLOG	GY:	line	ear							

(ii) MOLECULE TYPE: cDNA

(iii) HYPOTHETICAL:
(iv) ANTI-SENSE:

FRAGMENT TYPE: (v) ORIGINAL SOURCE: human IgM antibody (vi) (A) ORGANISM: (B) STRAIN: INDIVIDUAL ISOLATE: (C) (D) DEVELOPMENTAL STAGE: (E) HAPLOTYPE: (F) TISSUE TYPE: CELL TYPE: (G) CELL LINE: (H) (I) ORGANELLE: (vii) IMMEDIATE SOURCE: (A) LIBRARY: (B) CLONE: (viii) POSITION IN GENOME: (A) CHROMOSOME/SEGMENT: (B) MAP POSITION: (C) UNITS: (ix) FEATURE: (A) NAME/KEY: (B) LOCATION: (C) IDENTIFICATION METHOD: (D) OTHER INFORMATION: (x) PUBLICATION INFORMATION: **AUTHORS:** (A) (B) TITLE: (C) JOURNAL: (D) VOLUME: (E) ISSUE: (F) PAGES: (G) DATE: DOCUMENT NUMBER: (H) (I) FILING DATE: PUBLICATION DATE: (J)

**RELEVANT RESIDUES:** 

(K)

(	(xi)	SEQUI	ENCE DESCRIPTION: SEQ ID NO:7:
C GAG	G GGG	GAA A	AAG GGT T 17
(2)	INFOR	ITAMS	ON FOR SEQ ID NO:8:
(	(i)	SEQUI	ENCE CHARACTERISTICS:
		(A)	LENGTH: 19 base pairs
		(B)	TYPE: nucleic acid
		(C)	STRANDEDNESS: double
		(D)	TOPOLOGY: linear
(	(ii)	MOLE	CULE TYPE: cDNA
ĺ	(iii)	HYPO	THETICAL: ,
ı	(iv)	ANTI-	-SENSE:
(	(v)	FRAGI	MENT TYPE:
(	(vi)	ORIG	INAL SOURCE: human IgM antibody
		(A)	ORGANISM:
		(B)	STRAIN:
		(C)	INDIVIDUAL ISOLATE:
		(D)	DEVELOPMENTAL STAGE:
		(E)	HAPLOTYPE:
		(F)	TISSUE TYPE:
		(G)	CELL TYPE:
		(H)	CELL LINE:
		(I)	ORGANELLE:
•	(vii)	IMME	DIATE SOURCE:
		(A)	LIBRARY:
		(B)	CLONE:
1	(viii)	POSI	rion in genome:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEAT	JRE:
		(A)	NAME/KEY:
		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:

OTHER INFORMATION:

(D)

(x) PUBLICATION INFORMATION:

AUTHORS:

JOURNAL:

TITLE:

(A)

(B)

(C)

G

		(D) VOLUME:
		(E) ISSUE:
		(F) PAGES:
		(G) DATE:
		(H) DOCUMENT NUMBER:
		(I) FILING DATE:
		(J) PUBLICATION DATE:
		(K) RELEVANT RESIDUES:
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:8:
G AA	AG CTC	CTC AGA GGA GGG 19
(2)	INFO	RMATION FOR SEQ ID NO:9:
	(i)	SEQUENCE CHARACTERISTICS:
		(A) LENGTH: 366 base pairs
		(B) TYPE: nucleic acid
		(C) STRANDEDNESS: double
		(D) TOPOLOGY: linear
	(ii)	MOLECULE TYPE: cDNA
	(iii)	HYPOTHETICAL:
	(iv)	ANTI-SENSE:
	(v)	FRAGMENT TYPE:
	(vi)	ORIGINAL SOURCE:
		(A) ORGANISM:
		(B) STRAIN:
		(C) INDIVIDUAL ISOLATE:
		(D) DEVELOPMENTAL STAGE:
		(E) HAPLOTYPE:
		(F) TISSUE TYPE:
		(G) CELL TYPE: Hybridoma producing human antibody 1-3-
		(H) CELL LINE:

- (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:

### (viii) POSITION IN GENOME:

- (A) CHROMOSOME/SEGMENT:
- (B) MAP POSITION:
- (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:
  - (F) PAGES:
  - (G) DATE:
  - (H) DOCUMENT NUMBER:
  - (I) FILING DATE:
  - (J) PUBLICATION DATE:
  - (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

CAC	CTG	CAG	CTG	CAG	GAG	TCG	GGC	CCA	GGA	CTG	GTG	AAG	CCT	TCG	45
GAC	ACC	CTG	TCC	CTC	ACC	TGC	ACT	GTC	TCT	GGT	GGC	TCC	ATC	AGC	90
AGT	AGT	AGT	TAC	TAC	TGG	GGC	TGG	ATC	CGC	CAG	CCC	CCA	GGG	AAG	135
GGC	CTG	GAG	TGG	ATT	GGG	AGT	ATC	TAT	TAT	AGT	GGG	AGC	ACC	TAC	180
TAC	AAC	CCG	TCC	CTC	AAG	AGT	CGA	GTC	ACC	ATA	TCC	GTA	GAC	ACG	225
TCC	AAG	AAC	CAG	TTC	TCC	CTG	AAG	CTG	AGC	TCT	GTG	ACC	GCC	GCA	270
GAG	ACG	GCT	GTG	TAT	TAC	TGT	GCG	AGG	GGG	AGC	TAC	GGG	GGC	TAC	315
TAC	TAC	GGT	ATG	GAC	GTC	TGG	GGC	CAA	GGG	ACC	ACG	GTC	ACC	GTC	360

TCC TCA 366

- (2) INFORMATION FOR SEQ ID NO:10:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 324 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody 1-3-1
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:
    - (C) UNITS:
  - (ix) FEATURE:
    - (A) NAME/KEY:
    - (B) LOCATION:
    - (C) IDENTIFICATION METHOD:
    - (D) OTHER INFORMATION:
  - (x) PUBLICATION INFORMATION:

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- (A) AUTHORS:
- (B) TITLE:
- (C) JOURNAL:
- (D) VOLUME:
- (E) ISSUE:
- (F) PAGES:
- (G) DATE:
- (H) DOCUMENT NUMBER:
- (I) FILING DATE:
- (J) PUBLICATION DATE:
- (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

TAT GAG CTG ACA CAG CCA CCC TCG GTG TCA GTG TCC CCA GGA CAG 45 ACG GCC AGG ATC ACC TGC TCT GGA GAT GCA TTG CCA AAG CAA TAT 90 GCT TAT TGG TAC CAG CAG AAG CCA GGC CAG GCC CCT GTG CTG GTG 135 ATA TAT AAA GAC AGT GAG AGG CCC TCA GGG ATC CCT GAG CGA TTC 180 TCT GGC TCC AGC TCA GGG ACA ACA GTC ACG TTG ACC ATC AGT GGA 225 GTC CAG GCA GAA GAC GAG GCT GAC TAT TAC TGT CAA TCA GCA GAC 270 AGC AGT GGT ACT TAT GAG GTA TTC GGC GGA GGG ACC AAG CTG ACC 315 324 GTC CTA GGT

### (2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 122 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:

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		( )	INDIVIDUAL ISOLATE.
		(D)	DEVELOPMENTAL STAGE:
		(E)	HAPLOTYPE:
		(F)	TISSUE TYPE:
		(G)	CELL TYPE: Hybridoma producing human antibody 1-3-1
		(H)	CELL LINE:
		(I)	ORGANELLE:
	(vii)	IMME	DIATE SOURCE:
		(A)	LIBRARY:
		(B)	CLONE:
	(viii)	POSIT	TION IN GENOME:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEATU	JRE:
		(A)	NAME/KEY:
			LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x) I	PUBLIC	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQUE	ENCE DESCRIPTION: SEQ ID NO:11:
	_	_	
	Leu G	In Lev	u Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser
1			5 10 15

- 60 **-**

Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser 25 20 Ser Ser Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys 40 35 Gly Leu Glu Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr 55 60 50 Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr 70 65 Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala 85 80 Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Ser Tyr Gly Gly Tyr 105 95 100 Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val 115 120 110 Ser Ser

### (2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 108 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody 1-3-1

		(1	I) (	CELL	LINE	Ξ:								
		( ]	()	RGAN	1ELLI	Ξ:								
	(vii	.) IN	MED1	ATE	SOUF	RCE:								
		( <i>P</i>	A) I	LIBRA	ARY:									
		( E	3) (	CLONE	Ξ:									
	(vii	i)PC	SITI	ON I	N GI	епомі	Ξ:							
		( <i>I</i>	A) (	CHRON	OSON	ME/SE	EGMEN	Tr:						
		( E	3) 1	MAP I	POSIT	CION:	:							
		((	C) (	JNITS	5:									
	(ix)	FI	EATUF	RE:										
		( 1	1 (4	IAME,	KEY:	;								
		( E	3) I	LOCAT	CION:	:								
		((	2) ]	DENT	TIFIC	CATIO	ON MI	ETHOL	):					
		([	) (	THE	RINI	FORMA	OITA	1:						
	(x)	PUE	BLICA	OITA	INI	FORMA	OITA	1:						
		( )	A) /	UTHO	DRS:									
		( E	3) 7	TITLE	Ξ:									
		((	<b>c</b> ) 3	JOURI	IAL:									
		<b>(</b> [	7 (C	OLUN	ME:									
		( F	Ξ) ]	SSUI	Ξ:									
		( H	F) I	PAGES	5:									
		((	3) [	DATE:	;									
		( F	1 (F	OCUN	MENT	NUME	BER:							
		( ]	[ ) I	FILIN	IG DA	ATE:								
		(5	J) I	PUBL	[CAT]	ON [	DATE:	:						
		( F	<) I	RELEV	TNAV	RES]	DUES	5:						
	(xi)	SI	EQUE	ICE I	DESCI	RIPT	ON:	SEQ	ID 1	NO:12	2:			
Tyr	Glu	Leu	Thr	Gln	Pro	Pro	Ser	Val	Ser	Val	Ser	Pro	Gly	Gln
1				5					10					15
Thr	Ala	Arg	Ile	Thr	Cys	Ser	Gly	Asp	Ala	Leu	Pro	Lys	Gln	Tyr
				20					25					30
Ala	Tyr	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Val	Leu	Val
				35					40					45
Ile	Tyr	Lys	Asp	Ser	Glu	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Arg	Phe

**-** 62 **-**

				50					55					60
Ser	Gly	Ser	Ser	Ser	Gly	Thr	Thr	Val	Thr	Leu	Thr	Ile	Ser	Gly
				65					70					75
Val	Gln	Ala	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Ser	Ala	Asp
				80					85					90
Ser	Ser	Gly	Thr	Tyr	Glu	Val	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Thr
				95					100					105
Val	Leu	Gly												

- (2) INFORMATION FOR SEQ ID NO:13:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 8 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
- (G) CELL TYPE: hybridoma producing human monoclonal antibody, an antigen to which exists on the surface of cancer cell membrane

- (H) CELL LINE:
- (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:

	(viii	)POSI	rion in genome:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION: 4
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION: /note = "Cys or Ser"
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION: 5
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION: /note = "Gly or Ser"
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION: 6
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION: /note = "Phe or Tyr"
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQUI	ENCE DESCRIPTION: SEQ ID NO:13:
Ile	Ser S	er Xaa	a Xaa Xaa Tyr Trp

- (2) INFORMATION FOR SEQ ID NO:14:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 12 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: hybridoma producing human monoclonal antibody, an antigen to which exists on the surface of cancer cell membrane
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:
    - (C) UNITS:
  - (ix) FEATURE:
    - (A) NAME/KEY:
    - (B) LOCATION: 3
    - (C) IDENTIFICATION METHOD:
    - (D) OTHER INFORMATION: /note = "Tyr or Ser"
  - (x) PUBLICATION INFORMATION:

**-** 65 **-**

AUTHORS:

JOURNAL:

TITLE:

(A) (B)

(C)

		(D) VOLUME:
		(E) ISSUE:
		(F) PAGES:
		(G) DATE:
		(H) DOCUMENT NUMBER:
		(I) FILING DATE:
		(J) PUBLICATION DATE:
		(K) RELEVANT RESIDUES:
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:14:
Ile	Gly X	aa Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr
1		5 10
(2)	INFO	RMATION FOR SEQ ID NO:15:
	(i)	SEQUENCE CHARACTERISTICS:
		(A) LENGTH: 4 amino acids
		(B) TYPE: amino acid
		(C) STRANDEDNESS: single
		(D) TOPOLOGY: linear
	(ii)	MOLECULE TYPE: protein
	(iii)	HYPOTHETICAL:
	(iv)	ANTI-SENSE:
	(v)	FRAGMENT TYPE:
	(vi)	ORIGINAL SOURCE:
		(A) ORGANISM:
		(B) STRAIN:
		(C) INDIVIDUAL ISOLATE:
		(D) DEVELOPMENTAL STAGE:
		(E) HAPLOTYPE:
		(F) TISSUE TYPE:
		(G) CELL TYPE: hybridoma producing human monoclonal
		antibody, an antigen to which exists on the surface o

cancer cell membrane

- (H) CELL LINE:
- (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION: 2
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION: /note = "Ala or Met"
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION: 4
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION: /note = "Tyr or Val"
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:
  - (F) PAGES:
  - (G) DATE:
  - (H) DOCUMENT NUMBER:
  - (I) FILING DATE:
  - (J) PUBLICATION DATE:
  - (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

(2)	INFORMATION	FOR	SEQ	ID	NO:16:
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- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody GAH
  - (H) CELL LINE:
  - (I) ORGANELLE:

# (vii) IMMEDIATE SOURCE:

- (A) LIBRARY:
- (B) CLONE:

### (viii) POSITION IN GENOME:

- (A) CHROMOSOME/SEGMENT:
- (B) MAP POSITION:
- (C) UNITS:

### (ix) FEATURE:

- (A) NAME/KEY:
- (B) LOCATION:
- (C) IDENTIFICATION METHOD:
- (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:

**-** 68 **-AUTHORS:** (A) (B) TITLE: (C) JOURNAL: VOLUME: (D) (E) ISSUE: (F) PAGES: (G) DATE: (H) DOCUMENT NUMBER: FILING DATE: (I) (J) PUBLICATION DATE: (K) RELEVANT RESIDUES: SEQUENCE DESCRIPTION: SEQ ID NO:16: (xi) Ile Ser Ser Cys Gly Phe Tyr Trp Asn

- INFORMATION FOR SEQ ID NO:17:
  - SEQUENCE CHARACTERISTICS: (i)

5

- LENGTH: 12 amino acids (A)
- TYPE: amino acid (B)
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:

1

(2)

- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - INDIVIDUAL ISOLATE: (C)
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - CELL TYPE: Hybridoma producing human antibody GAH (G)
  - (H) CELL LINE:

		(I)	ORGANELLE:
	(vii) IMMEDIATE SOURCE:		
		(A)	LIBRARY:
		(B)	CLONE:
	(viii	) POSI	rion in genome:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEAT	JRE:
		(A)	NAME/KEY:
		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQUI	ENCE DESCRIPTION: SEQ ID NO:17:
Ile	Gly T	yr Ile	e Tyr Tyr Ser Gly Ser Thr Tyr Tyr
1			5 10
(2)			ON FOR SEQ ID NO:18:
	(i)	-	ENCE CHARACTERISTICS:
		(A)	LENGTH: 9 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

	(D)	TOPOLOGY: linear							
(ii)	MOLEC	CULE TYPE: protein							
(iii)	HYPOTHETICAL:								
(iv)	ANTI-	-SENSE:							
(v)	FRAGMENT TYPE:								
(vi)	ORIGI	INAL SOURCE:							
	(A)	ORGANISM:							
	(B)	STRAIN:							
	(C)	INDIVIDUAL ISOLATE:							
	(D)	DEVELOPMENTAL STAGE:							
	(E)	HAPLOTYPE:							
	(F)	TISSUE TYPE:							
	(G)	CELL TYPE: Hybridoma producing human antibody GAH							
	(H)	CELL LINE:							
	(I)	ORGANELLE:							
(vii)	IMME	DIATE SOURCE:							
	(A)	LIBRARY:							
	(B)	CLONE:							
(viii)	POSIT	TION IN GENOME:							
	(A)	CHROMOSOME/SEGMENT:							
	(B)	MAP POSITION:							
	(C)	UNITS:							
(ix)	FEATU	JRE:							
	(A)	NAME/KEY:							
	(B)	LOCATION:							
	(C)	IDENTIFICATION METHOD:							
	(D)	OTHER INFORMATION:							
(x) I	PUBLIC	CATION INFORMATION:							
	(A)	AUTHORS:							
	(B)	TITLE:							
	(C)	JOURNAL:							
	(D)	VOLUME:							
	(E)	ISSUE:							
	(F)	PAGES:							
	(G)	DATE:							

- (H) DOCUMENT NUMBER:
- (I) FILING DATE:
- (J) PUBLICATION DATE:
- (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Ser Thr Arg Leu Arg Gly Ala Asp Tyr

5

1

- (2) INFORMATION FOR SEQ ID NO:19:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 17 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody GAH
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:

		(C)	UNITS:		
	(ix)	FEATURE:			
		(A)	NAME/KEY:		
		(B)	LOCATION:		
		(C)	IDENTIFICATION METHOD:		
		(D)	OTHER INFORMATION:		
	(x)	PUBLI	CATION INFORMATION:		
		(A)	AUTHORS:		
		(B)	TITLE:		
		(C)	JOURNAL:		
		(D)	VOLUME:		
		(E)	ISSUE:		
		(F)	PAGES:		
		(G)	DATE:		
		(H)	DOCUMENT NUMBER:		
		(I)	FILING DATE:		
		(J)	PUBLICATION DATE:		
		(K)	RELEVANT RESIDUES:		
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:19:		
T 110	Com C	ow C1:	n Ser Val Leu Tyr Asn Ser Asn Asn Lys Lys Tyr Leu Ala		
LуS 1	ser s	er Gr	5 10 15		
1			5		
(2)	INFO	RMATI	ON FOR SEQ ID NO:20:		
,	(i)		ENCE CHARACTERISTICS:		
		(A)	LENGTH: 7 amino acids		
		(B)	TYPE: amino acid		
		(C)	TYPE: amino acid STRANDEDNESS: single		
	(ii)	(C) (D)	STRANDEDNESS: single		
		(C) (D) MOLE	STRANDEDNESS: single TOPOLOGY: linear		
		(C) (D) MOLE HYPO	STRANDEDNESS: single TOPOLOGY: linear CULE TYPE: protein		
	(iii)	(C) (D) MOLE HYPO	STRANDEDNESS: single TOPOLOGY: linear CULE TYPE: protein THETICAL:		
	(iii) (iv)	(C) (D) MOLE HYPO ANTI FRAG	STRANDEDNESS: single TOPOLOGY: linear CULE TYPE: protein THETICAL: -SENSE:		
	(iii) (iv) (v)	(C) (D) MOLE HYPO ANTI FRAG	STRANDEDNESS: single TOPOLOGY: linear CULE TYPE: protein THETICAL: -SENSE: MENT TYPE:		

- (B) STRAIN:
- (C) INDIVIDUAL ISOLATE:
- (D) DEVELOPMENTAL STAGE:
- (E) HAPLOTYPE:
- (F) TISSUE TYPE:
- (G) CELL TYPE: Hybridoma producing human antibody GAH
- (H) CELL LINE:
- (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:
  - (F) PAGES:
  - (G) DATE:
  - (H) DOCUMENT NUMBER:
  - (I) FILING DATE:
  - (J) PUBLICATION DATE:
  - (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

1

- (2) INFORMATION FOR SEQ ID NO:21:
  - (i) SEQUENCE CHARACTERISTICS:

5

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody GAH
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:

(A)

**AUTHORS:** 

		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:21:
Gln	Gln T	yr Ty:	r Ser Thr Pro Trp Thr
1			5
(2)			ON FOR SEQ ID NO:22:
	(i)	~	ENCE CHARACTERISTICS:
		(A)	LENGTH: 10 amino acids
		• •	TYPE: amino acid
			STRANDEDNESS: single
			TOPOLOGY: linear
			CULE TYPE: protein
	,		THETICAL:
	, ,		-SENSE:
	(v)		MENT TYPE:
	(vi)		INAL SOURCE:
		(A)	ORGANISM:
		(B)	STRAIN:
		(C)	INDIVIDUAL ISOLATE:
		(D)	DEVELOPMENTAL STAGE:
		(E)	HAPLOTYPE:
		(F)	TISSUE TYPE:
		(G)	CELL TYPE: Hybridoma producing human antibody 1-3-1
		(H)	CELL LINE:

		(I)	ORGANELLE:
	(vii)	IMME	DIATE SOURCE:
		(A)	LIBRARY:
		(B)	CLONE:
	(viii	) POSI	TION IN GENOME:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:22:
[le	Ser S	er Se	r Ser Tyr Tyr Trp Gly Trp
1			5 10
(2)	INFO	RMATI	ON FOR SEQ ID NO:23:
	(i)	SEQU	ENCE CHARACTERISTICS:
		(A)	LENGTH: 14 amino acids

TYPE: amino acid

STRANDEDNESS: single

(B)

(C)

(D) TOPOLOGY: linear

(ii)	MOLE	CULE TYPE: protein			
(iii)	HYPOTHETICAL:				
(iv)	ANTI-	-SENSE:			
(v)	FRAGI	MENT TYPE:			
(vi)	ORIG	INAL SOURCE:			
	(A)	ORGANISM:			
	(B)	STRAIN:			
	(C)	INDIVIDUAL ISOLATE:			
	(D)	DEVELOPMENTAL STAGE:			
	(E)	HAPLOTYPE:			
	(F)	TISSUE TYPE:			
	(G)	CELL TYPE: Hybridoma producing human antibody 1-3-1			
	(H)	CELL LINE:			
	(I)	ORGANELLE:			
(vii)	IMME	DIATE SOURCE:			
	(A)	LIBRARY:			
	(B)	CLONE:			
(viii)	) POSI	TION IN GENOME:			
	(A)	CHROMOSOME/SEGMENT:			
	(B)	MAP POSITION:			
	(C)	UNITS:			
(ix)	FEAT	JRE:			
	(A)	NAME/KEY:			
	(B)	LOCATION:			
	(C)	IDENTIFICATION METHOD:			
	(D)	OTHER INFORMATION:			
(x)	PUBLI	CATION INFORMATION:			
	(A)	AUTHORS:			
	(B)	TITLE:			
	(C)	JOURNAL:			
	(D)	VOLUME:			
	(E)	ISSUE:			
	(F)	PAGES:			
	(G)	DATE:			

- (H) DOCUMENT NUMBER:
- (I) FILING DATE:
- (J) PUBLICATION DATE:
- (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

- (2) INFORMATION FOR SEQ ID NO:24:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 12 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody 1-3-1
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:

(C)

(A)

FEATURE:

(ix)

(2

UNITS:

NAME/KEY:

		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:24:
G]	ly Ser	Tyr	Gly Gly Tyr Tyr Tyr Gly Met Asp Val
	1		5 10
)			ON FOR SEQ ID NO:25:
	(i)		ENCE CHARACTERISTICS:
		(A)	
			TYPE: amino acid
		(C)	STRANDEDNESS: single
		(D)	
	(ii)		CULE TYPE: protein
			THETICAL:
			-SENSE:
	(V)	FRAG	MENT TYPE:
	(wi)	OPTC	INAL SOURCE:
	( * + )	OKIG	INAL SOURCE.
	( * 1 )	(A)	
	( • ± )		

- 80 -

- (B) STRAIN: INDIVIDUAL ISOLATE: (C) (D) DEVELOPMENTAL STAGE: HAPLOTYPE: (E) TISSUE TYPE: (F) CELL TYPE: Hybridoma producing human antibody 1-3-1 (G) (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE: LIBRARY: (A) (B) CLONE: (viii) POSITION IN GENOME: (A) CHROMOSOME/SEGMENT: (B) MAP POSITION: (C) UNITS: (ix) FEATURE: (A) NAME/KEY: (B) LOCATION: (C) IDENTIFICATION METHOD: (D) OTHER INFORMATION: (x) PUBLICATION INFORMATION: (A) AUTHORS: (B) TITLE: (C) JOURNAL: (D) VOLUME: (E) ISSUE: (F) PAGES: (G) DATE: (H) DOCUMENT NUMBER: (I) FILING DATE: PUBLICATION DATE: (J)
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

RELEVANT RESIDUES:

(K)

1

- (2) INFORMATION FOR SEQ ID NO:26:
  - (i) SEQUENCE CHARACTERISTICS:

5

- (A) LENGTH: 4 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody 1-3-1
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:

- (A) AUTHORS:
- (B) TITLE:
- (C) JOURNAL:
- (D) VOLUME:
- (E) ISSUE:
- (F) PAGES:
- (G) DATE:
- (H) DOCUMENT NUMBER:
- (I) FILING DATE:
- (J) PUBLICATION DATE:
- (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

Lys Asp Ser Glu

1

- (2) INFORMATION FOR SEQ ID NO:27:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 11 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody 1-3-1
    - (H) CELL LINE:

	(vii)	IMME	DIATE SOURCE:
		(A)	LIBRARY:
		(B)	CLONE:
	(viii	) POSI	TION IN GENOME:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:27:
Gln	Ser A	la As	p Ser Ser Gly Thr Tyr Glu Val
1			5 10
(2)	INFO	RMATI	ON FOR SEQ ID NO:28:
	(i)	SEQU	ENCE CHARACTERISTICS:
		(A)	LENGTH: 24 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

(B) (C)

(I) ORGANELLE:

(D) TOPO	LOGY:	linear
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- (ii) MOLECULE TYPE: cDNA
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human monoclonal antibody, an antigen to which exists on the surface of cancer cell membrane
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:

(F) PAGES: (G) DATE: (H) DOCUMENT NUMBER: FILING DATE: (I) PUBLICATION DATE: (J) RELEVANT RESIDUES: (K) SEQUENCE DESCRIPTION: SEQ ID NO:28: (xi) ATC AGC AGT WGT RGT TWC TAC TGG 24 INFORMATION FOR SEQ ID NO:29: (i) SEQUENCE CHARACTERISTICS: LENGTH: 36 base pairs (A) TYPE: nucleic acid (B) (C) STRANDEDNESS: double (D) TOPOLOGY: linear (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: (iv) ANTI-SENSE: (V) FRAGMENT TYPE: ORIGINAL SOURCE: (vi) (A) ORGANISM: (B) STRAIN: INDIVIDUAL ISOLATE: (C) (D) DEVELOPMENTAL STAGE: (E) HAPLOTYPE: TISSUE TYPE: (F) CELL TYPE: Hybridoma producing human monoclonal (G) antibody, an antigen to which exists on the surface of cancer cell membrane (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE:

LIBRARY:

CLONE:

(A) (B)

(2)

## - 86 -(viii) POSITION IN GENOME: (A) CHROMOSOME/SEGMENT: MAP POSITION: (B) (C) UNITS: FEATURE: (ix) (A) NAME/KEY: (B) LOCATION: (C) IDENTIFICATION METHOD: OTHER INFORMATION: (D) (x) PUBLICATION INFORMATION: (A) **AUTHORS:** (B) TITLE: (C) JOURNAL: VOLUME: (D) (E) ISSUE: (F) PAGES: DATE: (G) DOCUMENT NUMBER: (H) (I) FILING DATE: PUBLICATION DATE: (J) RELEVANT RESIDUES: (K) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29: ATT GGG WRY ATC TAT TAY AGT GGG AGC ACC TAC TAC 36 (2) INFORMATION FOR SEQ ID NO:30: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 12 base pairs TYPE: nucleic acid (B) STRANDEDNESS: double (C) (D) TOPOLOGY: linear (ii) MOLECULE TYPE: cDNA

(iii) HYPOTHETICAL:
(iv) ANTI-SENSE:

(V)

FRAGMENT TYPE:

- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human monoclonal antibody, an antigen to which exists on the surface of cancer cell membrane
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:
  - (F) PAGES:
  - (G) DATE:
  - (H) DOCUMENT NUMBER:
  - (I) FILING DATE:
  - (J) PUBLICATION DATE:

- (K) RELEVANT RESIDUES:
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GGK RYK GAC KWC 12

- (2) INFORMATION FOR SEQ ID NO:31:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 24 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody GAH
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:
    - (C) UNITS:
  - (ix) FEATURE:
    - (A) NAME/KEY:
    - (B) LOCATION:

- 89 -IDENTIFICATION METHOD: (C) OTHER INFORMATION: (D) (x) PUBLICATION INFORMATION: (A) AUTHORS: (B) TITLE: (C) JOURNAL: (D) VOLUME: ISSUE: (E) (F) PAGES: (G) DATE: DOCUMENT NUMBER: (H) FILING DATE: (I) (J) PUBLICATION DATE: RELEVANT RESIDUES: (K) SEQUENCE DESCRIPTION: SEQ ID NO:31: (xi) ATC AGC AGT TGT GGT TTC TAC TGG 24 (2) INFORMATION FOR SEQ ID NO:32: SEQUENCE CHARACTERISTICS: (i) LENGTH: 36 base pairs (A) TYPE: nucleic acid (B) (C) STRANDEDNESS: double TOPOLOGY: linear (D) (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: (iv) ANTI-SENSE: FRAGMENT TYPE: (V) (vi) ORIGINAL SOURCE: (A) ORGANISM: (B) STRAIN: INDIVIDUAL ISOLATE: (C) (D) DEVELOPMENTAL STAGE: (E) HAPLOTYPE: (F) TISSUE TYPE:

- 90 -CELL TYPE: Hybridoma producing human antibody GAH (G) (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE: (A) LIBRARY: (B) CLONE: (viii) POSITION IN GENOME: (A) CHROMOSOME/SEGMENT: (B) MAP POSITION: UNITS: (C) FEATURE: (A) NAME/KEY: (B) LOCATION: (C) IDENTIFICATION METHOD: (D) OTHER INFORMATION: PUBLICATION INFORMATION: (A) **AUTHORS:** (B) TITLE: (C) JOURNAL: (D) VOLUME: (E) ISSUE: (F) PAGES: (G) DATE: (H) DOCUMENT NUMBER: (I) FILING DATE: (J) PUBLICATION DATE: (K) RELEVANT RESIDUES: SEQUENCE DESCRIPTION: SEQ ID NO:32: ATT GGG TAC ATC TAT TAC AGT GGG AGC ACC TAC TAC 36 INFORMATION FOR SEQ ID NO:33:
- (2)

(ix)

(x)

(xi)

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 27 base pairs
  - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (iii) HYPOTHETICAL:
- (iv) ANTI-SENSE:
- (v) FRAGMENT TYPE:
- (vi) ORIGINAL SOURCE:
  - (A) ORGANISM:
  - (B) STRAIN:
  - (C) INDIVIDUAL ISOLATE:
  - (D) DEVELOPMENTAL STAGE:
  - (E) HAPLOTYPE:
  - (F) TISSUE TYPE:
  - (G) CELL TYPE: Hybridoma producing human antibody GAH
  - (H) CELL LINE:
  - (I) ORGANELLE:
- (vii) IMMEDIATE SOURCE:
  - (A) LIBRARY:
  - (B) CLONE:
- (viii) POSITION IN GENOME:
  - (A) CHROMOSOME/SEGMENT:
  - (B) MAP POSITION:
  - (C) UNITS:
- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - (D) OTHER INFORMATION:
- (x) PUBLICATION INFORMATION:
  - (A) AUTHORS:
  - (B) TITLE:
  - (C) JOURNAL:
  - (D) VOLUME:
  - (E) ISSUE:
  - (F) PAGES:

DATE: (G) DOCUMENT NUMBER: (H) (I) FILING DATE: PUBLICATION DATE: (J) (K) RELEVANT RESIDUES: SEQUENCE DESCRIPTION: SEQ ID NO:33: (xi) TCT ACC CGA CTA CGG GGG GCT GAC TAC 27 INFORMATION FOR SEQ ID NO:34: (2) SEQUENCE CHARACTERISTICS: (i) LENGTH: 51 base pairs (A) (B) TYPE: nucleic acid (C) STRANDEDNESS: double (D) TOPOLOGY: linear (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: (iv) ANTI-SENSE: (v) FRAGMENT TYPE: (vi) ORIGINAL SOURCE: (A) ORGANISM: (B) STRAIN: INDIVIDUAL ISOLATE: (C) (D) DEVELOPMENTAL STAGE: (E) HAPLOTYPE: (F) TISSUE TYPE: CELL TYPE: Hybridoma producing human antibody GAH (G) (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE: LIBRARY: (A) (B) CLONE: (viii) POSITION IN GENOME: CHROMOSOME/SEGMENT: (A)

MAP POSITION:

(B)

		(C)	UNITS:	
	(ix)	FEAT	URE:	
		(A)	NAME/KEY:	
		(B)	LOCATION:	
		(C)	IDENTIFICATION METHOD:	
		(D)	OTHER INFORMATION:	
	(x)	PUBLI	CATION INFORMATION:	
		(A)	AUTHORS:	
		(B)	TITLE:	
		(C)	JOURNAL:	
		(D)	VOLUME:	
		(E)	ISSUE:	
		(F)	PAGES:	
		(G)	DATE:	
		(H)	DOCUMENT NUMBER:	
		(I)	FILING DATE:	
		(J)	PUBLICATION DATE:	
		(K)	RELEVANT RESIDUES:	
	(xi)	SEQUI	ENCE DESCRIPTION: SEQ ID NO:34:	;
AAG	TCC A	GC CA	G AGT GTT TTA TAC AAC TCC	30
AAC	AAT A	AG AA	A TAC TTA GCT	51
(2)	INFO	RMATI	ON FOR SEQ ID NO:35:	
	(i)	SEQUI	ENCE CHARACTERISTICS:	
		(A)	LENGTH: 21 base pairs	
		(B)	TYPE: nucleic acid	
		(C)	STRANDEDNESS: double	
		(D)	TOPOLOGY: linear	
	(ii)	MOLE	CULE TYPE: cDNA	
	(iii)	HYPO	THETICAL:	
	(iv)	ANTI	-sense:	
	(V)	FRAGI	MENT TYPE:	

(vi)

ORIGINAL SOURCE:
(A) ORGANISM:

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STRAIN: (B) (C) INDIVIDUAL ISOLATE: DEVELOPMENTAL STAGE: (D) (E) HAPLOTYPE: (F) TISSUE TYPE: CELL TYPE: Hybridoma producing human antibody GAH (G) (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE: LIBRARY: (A) (B) CLONE: (viii) POSITION IN GENOME: CHROMOSOME/SEGMENT: (A) (B) MAP POSITION: (C) UNITS: FEATURE: (ix) NAME/KEY: (A) (B) LOCATION: (C) IDENTIFICATION METHOD: (D) OTHER INFORMATION: (x) PUBLICATION INFORMATION: (A) **AUTHORS:** (B) TITLE: (C) JOURNAL: (D) VOLUME: (E) ISSUE: (F) PAGES: (G) DATE: DOCUMENT NUMBER: (H) FILING DATE: (I) PUBLICATION DATE: (J)

(K)

(xi)

RELEVANT RESIDUES:

SEQUENCE DESCRIPTION: SEQ ID NO:35:

- (2) INFORMATION FOR SEQ ID NO:36:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 27 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody GAH
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:
    - (C) UNITS:
  - (ix) FEATURE:
    - (A) NAME/KEY:
    - (B) LOCATION:
    - (C) IDENTIFICATION METHOD:
    - (D) OTHER INFORMATION:
  - (x) PUBLICATION INFORMATION:
    - (A) AUTHORS:
    - (B) TITLE:

(C)

JOURNAL:

		(D) VOLUME:
		(E) ISSUE:
		(F) PAGES:
		(G) DATE:
		(H) DOCUMENT NUMBER:
		(I) FILING DATE:
		(J) PUBLICATION DATE:
		(K) RELEVANT RESIDUES:
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:36:
CAG	CAG T	AT TAT AGT ACT CCG TGG ACG 27
(2)	INFO	RMATION FOR SEQ ID NO:37:
	(i)	SEQUENCE CHARACTERISTICS:
		(A) LENGTH: 30 base pairs
		(B) TYPE: nucleic acid
		(C) STRANDEDNESS: double
		(D) TOPOLOGY: linear
	(ii)	MOLECULE TYPE: cDNA
	(iii)	HYPOTHETICAL:
	(iv)	ANTI-SENSE:
	(V)	FRAGMENT TYPE:
	(vi)	ORIGINAL SOURCE:
		(A) ORGANISM:
		(B) STRAIN:
		(C) INDIVIDUAL ISOLATE:
		(D) DEVELOPMENTAL STAGE:
		(E) HAPLOTYPE:
		(F) TISSUE TYPE:
		(G) CELL TYPE: Hybridoma producing human antibody 1-3-1
		(H) CELL LINE:
		(I) ORGANELLE:
	(vii)	IMMEDIATE SOURCE:
		(A) LIBRARY:

		(C)	UNITS:
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQUI	ENCE DESCRIPTION: SEQ ID NO:37:
ATC	AGC A	GT AG	T AGT TAC TAC TGG GGC TGG 30
(2)	INFO	RMATI	ON FOR SEQ ID NO:38:
	(i)	SEQUI	ENCE CHARACTERISTICS:
		(A)	LENGTH: 42 base pairs
		(B)	TYPE: nucleic acid
		(C)	STRANDEDNESS: double
		(D)	TOPOLOGY: linear
	(ii)	MOLE	CULE TYPE: cDNA
	(iii)	НҮРОЗ	THETICAL:
	(iv)	ANTI-	-SENSE:

CHROMOSOME/SEGMENT:

(B) CLONE: (viii) POSITION IN GENOME:

(B) MAP POSITION:

(A)

(V) FRAGMENT TYPE:

(vi)	ORIG	INAL SOURCE:
	(A)	ORGANISM:
	(B)	STRAIN:
	(C)	INDIVIDUAL ISOLATE:
	(D)	DEVELOPMENTAL STAGE:
	(E)	HAPLOTYPE:
	(F)	TISSUE TYPE:
	(G)	CELL TYPE: Hybridoma producing human antibody 1-3-1
	(H)	CELL LINE:
	(I)	ORGANELLE:
(vii)	IMME	DIATE SOURCE:
	(A)	LIBRARY:
	(B)	CLONE:
(viii	)POSI	TION IN GENOME:
	(A)	CHROMOSOME/SEGMENT:
	(B)	MAP POSITION:
	(C)	UNITS:
(ix)	FEAT	URE:
	(A)	NAME/KEY:
	(B)	LOCATION:
	(C)	IDENTIFICATION METHOD:
	(D)	OTHER INFORMATION:
(x)	PUBLI	CATION INFORMATION:
	(A)	AUTHORS:
	(B)	TITLE:
	(C)	JOURNAL:
	(D)	VOLUME:
	(E)	ISSUE:
	(F)	PAGES:
	(G)	DATE:
	(H)	DOCUMENT NUMBER:
	(I)	FILING DATE:
	(J)	PUBLICATION DATE:
	(K)	RELEVANT RESIDUES.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

ATT GGG AGT ATC TAT TAT AGT GGG AGC ACC TAC TAC AAC CCG 42

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- (2) INFORMATION FOR SEQ ID NO:39:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 36 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (iii) HYPOTHETICAL:
  - (iv) ANTI-SENSE:
  - (v) FRAGMENT TYPE:
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM:
    - (B) STRAIN:
    - (C) INDIVIDUAL ISOLATE:
    - (D) DEVELOPMENTAL STAGE:
    - (E) HAPLOTYPE:
    - (F) TISSUE TYPE:
    - (G) CELL TYPE: Hybridoma producing human antibody 1-3-1
    - (H) CELL LINE:
    - (I) ORGANELLE:
  - (vii) IMMEDIATE SOURCE:
    - (A) LIBRARY:
    - (B) CLONE:
  - (viii) POSITION IN GENOME:
    - (A) CHROMOSOME/SEGMENT:
    - (B) MAP POSITION:
    - (C) UNITS:
  - (ix) FEATURE:
    - (A) NAME/KEY:
    - (B) LOCATION:
    - (C) IDENTIFICATION METHOD:
    - (D) OTHER INFORMATION:

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	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:39:
GGG	AGC T	AC GG	G GGC TAC TAC GGT ATG GAC GTC 36
(2)	INFO	RMATI	ON FOR SEQ ID NO:40:
	(i)	SEQU	ENCE CHARACTERISTICS:
		(A)	LENGTH: 27 base pairs
		(B)	TYPE: nucleic acid
		(C)	STRANDEDNESS: double
		(D)	TOPOLOGY: linear
	(ii)	MOLE	CULE TYPE: cDNA
	(iii)	HYPO'	THETICAL:
	(iv)	ANTI	-SENSE:
	(V)	FRAGI	MENT TYPE:
	(vi)	ORIG	INAL SOURCE:
		(A)	ORGANISM:
		(B)	STRAIN:
		(C)	INDIVIDUAL ISOLATE:
		(D)	DEVELOPMENTAL STAGE:
		(E)	HAPLOTYPE:
		(F)	TISSUE TYPE:
		(G)	CELL TYPE: Hybridoma producing human antibody 1-3-1
		(H)	CELL LINE:

		(I)	ORGANELLE:
	(vii)	IMME	DIATE SOURCE:
		(A)	LIBRARY:
		(B)	CLONE:
	(viii	) POSI	TION IN GENOME:
		(A)	CHROMOSOME/SEGMENT:
		(B)	MAP POSITION:
		(C)	UNITS:
	(ix)	FEAT	URE:
		(A)	NAME/KEY:
		(B)	LOCATION:
		(C)	IDENTIFICATION METHOD:
		(D)	OTHER INFORMATION:
	(x)	PUBLI	CATION INFORMATION:
		(A)	AUTHORS:
		(B)	TITLE:
		(C)	JOURNAL:
		(D)	VOLUME:
		(E)	ISSUE:
		(F)	PAGES:
		(G)	DATE:
		(H)	DOCUMENT NUMBER:
		(I)	FILING DATE:
		(J)	PUBLICATION DATE:
		(K)	RELEVANT RESIDUES:
	(xi)	SEQU	ENCE DESCRIPTION: SEQ ID NO:40
GAT	GCA T	TG CC	A AAG CAA TAT GCT TAT 27

- (2) INFORMATION FOR SEQ ID NO:41:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 12 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: double

	(D)	TOPOLOGY: linear					
(ii)	MOLE	CULE TYPE: cDNA					
(iii)	HYPOTHETICAL:						
(iv)	ANTI	ANTI-SENSE:					
(V)	FRAGI	MENT TYPE:					
(vi)	ORIG	INAL SOURCE:					
	(A)	ORGANISM:					
	(B)	STRAIN:					
	(C)	INDIVIDUAL ISOLATE:					
	(D)	DEVELOPMENTAL STAGE:					
	(E)	HAPLOTYPE:					
	(F)	TISSUE TYPE:					
	(G)	CELL TYPE: Hybridoma producing human antibody 1-3-1					
	(H)	CELL LINE:					
	(I)	ORGANELLE:					
(vii)	IMME	DIATE SOURCE:					
	(A)	LIBRARY:					
	(B)	CLONE:					
(viii	) POSI	TION IN GENOME:					
	(A)	CHROMOSOME/SEGMENT:					
	(B)	MAP POSITION:					
	(C)	UNITS:					
(ix)	FEAT	URE:					
	(A)	NAME/KEY:					
	(B)	LOCATION:					
	(C)	IDENTIFICATION METHOD:					
	(D)	OTHER INFORMATION:					
(x)	PUBLI	CATION INFORMATION:					
	(A)	AUTHORS:					
	(B)	TITLE:					
	(C)	JOURNAL:					
	(D)	VOLUME:					
	(E)	ISSUE:					
	(F)	PAGES:					
	(G)	DATE:					

- DOCUMENT NUMBER: (H) FILING DATE: (I) (J) PUBLICATION DATE: RELEVANT RESIDUES: (K) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41: AAA GAC AGT GAG 12 INFORMATION FOR SEQ ID NO:42: SEQUENCE CHARACTERISTICS: LENGTH: 33 base pairs (A) TYPE: nucleic acid (B) STRANDEDNESS: double (C) TOPOLOGY: linear (D) MOLECULE TYPE: cDNA (ii) (iii) HYPOTHETICAL: (iv) ANTI-SENSE: FRAGMENT TYPE: (V) (vi) ORIGINAL SOURCE: ORGANISM: (A) (B) STRAIN: INDIVIDUAL ISOLATE: (C) DEVELOPMENTAL STAGE: (D) (E) HAPLOTYPE: (F) TISSUE TYPE: (G) CELL TYPE: Hybridoma producing human antibody 1-3-1 (H) CELL LINE: (I) ORGANELLE: (vii) IMMEDIATE SOURCE:

(viii) POSITION IN GENOME:

(B) MAP POSITION:

CHROMOSOME/SEGMENT:

LIBRARY:

CLONE:

(C) UNITS:

(A)

(B)

(A)

(2)

(i)

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- (ix) FEATURE:
  - (A) NAME/KEY:
  - (B) LOCATION:
  - (C) IDENTIFICATION METHOD:
  - OTHER INFORMATION: (D)
- (x) PUBLICATION INFORMATION:
  - (A) **AUTHORS:**
  - (B) TITLE:
  - (C) JOURNAL:
  - VOLUME: (D)
  - (E) ISSUE:
  - (F) PAGES:
  - (G) DATE:
  - DOCUMENT NUMBER: (H)
  - (I) FILING DATE:
  - (J) PUBLICATION DATE:
  - RELEVANT RESIDUES: (K)
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

CAA TCA GCA GAC AGC AGT GGT ACT TAT GAG GTA 33